IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the Application are reproduced below.

1. (Currently Amended) A system for synchronizing clock dividers in a wireless network, comprising:

a first plurality of wireless base stations formed into a first cluster;

a second plurality of wireless base stations formed into a second cluster;

wherein at least a first wireless base station in the first cluster has a wireless communication link to a first wireless base station in the second cluster**, and wherein the first wireless base station in the first and second clusters each include a local clock unit having an internal clock divider that is operable to derive frame and burst clocks from a received master clock signal**;

wherein the first wireless base station in the first cluster is operable to transmit a synchronization pulse to other wireless base stations in the first cluster and to the first wireless base station in the second cluster;

wherein the first wireless base station in the second cluster is operable to transmit the synchronization pulse to other wireless base stations in the second cluster;

wherein ~~all of~~ the **first** wireless base stations are operable to reset **the** internal clock dividers in response to the synchronization pulse **in order to achieve a level of synchronization separate form synchronization provided by the master clock signal**.

2. (Original) The system of Claim 1, wherein the first wireless base station of the first cluster also lies in the second cluster.

3. (Original) The system of Claim 1, wherein the synchronization pulse is propagated to all wireless base stations over a wireless transmission link.

4. (Original) The system of Claim 3, wherein the propagation of the synchronization pulse occurs over a same wireless transmission link as used by all base stations to communicate with mobile stations.

5. (Original) The system of Claim 3, wherein the propagation of the synchronization pulse occurs over the wired link used to connect the base stations to the network.

6. (Original) The system of Claim 4, wherein the synchronization pulse is transmitted during a mobile station low usage period.

7. (Original) The system of Claim 1, wherein the synchronization pulse is transmitted on a periodic basis.

8. (Original) The system of Claim 1, wherein the synchronization pulse is transmitted on a non-periodic basis.

9. (Currently Amended) The system of Claim 1, wherein the internal clock dividers are operable to generate local signals for use by corresponding base stations in response to receipt of ~~a~~ **the** master clock signal.

10. (Original) The system of Claim 9, wherein the synchronization pulse is operable to provide synchronization of local signals among all of the wireless base stations.

11. (Original) The system of Claim 10, wherein the local signals between all of the wireless base stations are synchronized to within one period of the master clock signal.

12. (Currently Amended) A method for synchronizing clock dividers in a wireless network, comprising:

grouping a first plurality of wireless base stations into a first cluster;

grouping a second plurality of base stations into a second cluster~~, one of the first plurality of wireless base stations being in the second cluster~~;

transmitting a synchronization pulse to each of the first plurality of wireless base stations in the first cluster, **wherein at least a first wireless base station in the first cluster has a wireless communication link to a first wireless base station in the second cluster, and wherein the first wireless base station in the first and second clusters each include a local clock unit having an internal clock divider that is operable to derive frame and burst clocks from a received master clock signal;**

wherein the first wireless base station in the first cluster is operable to transmit a synchronization pulse to other wireless base stations in the first cluster and to the first wireless base station in the second cluster;

wherein the first wireless base station in the second cluster is operable to transmit the synchronization pulse to other wireless base stations in the second cluster;

transmitting the synchronization pulse to the second plurality of wireless base stations in the second cluster ~~through the one of the plurality of first wireless bases stations in the second cluster~~;

resetting **the internal** clock dividers in each wireless base station in response to the synchronization pulse **in order to achieve a level of synchronization separate form synchronization provided by the master clock signal**.

13. (Original) The method of Claim 12, wherein the synchronization pulse is transmitted over a same wireless interface used for communications by mobile stations.

14. (Cancelled)

15. (Original) The method of Claim 12, wherein the synchronization signal is transmitted periodically from a particular one of the first plurality of wireless base stations in the first cluster.

16. (Original) The method of Claim 12, wherein the synchronization pulse is transmitted on a non-periodic basis.

17. (Currently Amended) A base station for use in a wireless network, comprising:

a local clock unit having a clock divider, the clock divider operable to receive a master clock signal, the clock divider operable to generate local signals in response to the master clock signal **and to derive frame and burst clocks from the master clock signal**;

a wireless interface operable to receive a synchronization pulse, the clock divider operable to reset in response to the synchronization pulse so that the local signals can be synchronized with local signals from other base stations **in order to achieve a level of synchronization separate form synchronization provided by the master clock signal**.

18. (Original) The base station of Claim 17, wherein the wireless interface is operable to transmit the synchronization pulse to one or more other base stations.

19. (Original) The base station of Claim 17, wherein the wireless interface provides communications for one or more mobile stations.

20. (Original) The base station of Claim 17, wherein the local signals are synchronized to within one period of the master clock signal.